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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,171	03/25/2004	Henricus Johannes Maria Meijer	MS307136.1/MSFTP615US	7763

27195 7590 02/22/2007

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EXAMINER	
LOVEL, KIMBERLY M	
ART UNIT	**PAPER NUMBER**
2167	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/809,171	MARIA MEIJER ET AL.	
	Examiner	Art Unit	
	Kimberly Lovel	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 December 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 December 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is responsive to the amendment filed 7 December 2006.

2. Claims 1-31 are pending in this application. Claims 1, 13, 18, 29, 30 and 31 are independent. In the Amendment filed 7 December 2006, claims 1-5, 7-12 and 15-31 have been amended. This Action is made Final.

3. The rejections of Claims 1-6, 12-16, 18-19, 26 and 29-31 as being anticipated by US PGPub 2005/0160108 to Charlet et al; Claims 7-8, 10 and 20 as being unpatentable over US PGPub 2005/0160108 to Charlet et al in view of US Patent No 6,658,429 to Dorsett, Jr.; Claims 11 and 21-23 as being unpatentable over US PGPub 2005/0160108 to Charlet et al in view of US PGPub 2004/0039964 to Russell et al; Claims 9, 17, 24, 25, 27 and 28 as being unpatentable over US PGPub 2005/0160108 to Charlet et al in view of US Patent No 6,125,391 to Meltzer et al have been maintained. Rejections using the respective arts have been added to reject the limitations added to the amended claims.

Drawings

4. The objections to the drawings (Fig. 10) have been withdrawn as necessitated by amendment.

Claim Objections

5. The objections to **claims 2-5, 7-12, 15-17 and 19-28** have been withdrawn as necessitated by amendment.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. The rejections of **claims 1-12 and 31** under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter have been withdrawn as necessitated by amendment.

8. **Claim 29** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding **claim 29**, the claim is directed towards a computer implemented signal transmitted between two or more computers. A signal is considered to be nonstatutory subject matter because it does not fall into any of statutory categories of invention.

According to MPEP 2106:

> There is always some form of physical transformation within a computer because a computer acts on signals and transforms them during its operation and changes the state of its components during the execution of a process. Even though such a physical transformation occurs within a computer, such activity is not determinative of whether the process is statutory because such transformation alone does not distinguish a statutory computer process from a nonstatutory computer process. What is determinative is not how the computer performs the process, but what the computer does to achieve a practical application. See *Arrhythmia*, 958 F.2d at 1057, 22 USPQ2d at 1036.

To allow for compact prosecution, the examiner will apply prior art to these claims as best understood, with the assumption that applicant will amend to overcome the stated 101 rejections.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-6, 12-16, 18-19, 26 and 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by US PGPub 2005/0160108 to Charlet et al (hereafter Charlet).

Referring to claim 1, Charlet discloses a system [system 400] that maps a first construct [XML document 202] of a domain [markup language] to a second construct [hierarchical database 204] ([0061]) of another domain [relational] comprising a computer-readable storage medium, comprising the following computer executable components (see [0035]-[0037]):

a bank [database schema 304] that stores at least one of a set of suppress field labels and a set of introduce field labels [the element names 308 that match the database field names 306] (see [0057]); and

a mapping component [mapping module 206] that utilizes at least one of a suppress field label and an introduce field label to facilitate mapping (see [0062], lines 1-3 and [0071] – mapping module 206 – uses XML schema 302 and database schema 304) the first construct [XML document 202] to the second construct [hierarchical database 204].

Referring to claim 2, Charlet discloses the system of claim 1, wherein the first construct is a named [XML element name] or an anonymous construct and the second construct is a named [database field name] or an anonymous construct, and the mapping comprises one of transforming the first named construct to the second named construct (see [0057] and [0071] – each XML element name is matched to a database field name); the first named construct to the second anonymous construct; the first anonymous construct to the second named construct; and the first anonymous construct to the second anonymous construct.

Referring to claim 3, Charlet discloses the system of claim 1, wherein the first construct is one of a markup language construct [XML document 202], an object oriented language construct, a relational construct and a user interface construct, and the second construct is one of a markup language construct, an object oriented language construct, a relational construct [hierarchical database 204] and a user interface construct (see [0061], lines 1-3).

Referring to claim 4, Charlet discloses the system of claim 3, wherein the markup language construct is one of an XML [XML document 202] (see [0061], lines 1-3) and a CLR construct, the object oriented language construct is one of a C++, a C#, a Java and a Visual Basic construct, and the relational construct is a SQL construct (see [0067], lines 3-11 – the input [first construct] can be a SQL query).

Referring to claim 5, Charlet discloses the system of claim 1, wherein the mapping is isomorphic (see [0064], lines 3-6 and [0073], lines 8-11 – according to page 9, line 11 of applicants' specification, an isomorphic mapping is a 1:1 mapping).

Referring to claim 6, Charlet discloses the system of claim 1, further comprising a mapping file that provides one or more of a default mapping, a user customized mapping, and a mediating schema [XML schema 302 and database schema 304] that facilitates mapping the first construct [XML document 202] to the second construct [hierarchical database 204] (see [0061] and [0062], lines 1-3).

Referring to claim 12, Charlet discloses the system of claim 1, wherein the mapping component performs at least one of the following: serializes an instance of the first construct to the second construct; deserializes an instance of the first construct to the second construct; persists the first construct to the second construct; restores the first construct from the second construct; publishes the first construct [XML document] in the second construct [hierarchical database] (see [0049] – the data from the XML document is passed to the hierarchical database and inserted); shreds the first construct from the second construct; and binds the first construct to the second construct.

Referring to claim 13, Charlet discloses a method that transforms constructs between domains [markup language domain to relational domain], comprising:

receiving a construct [XML document 202] (see [0065], lines 1-7);

obtaining a mapping [metadata schema 208] associated with the construct [XML document 202] (see [0070]-[0071]); and

employing the mapping to transform the construct [XML document] from a first domain [markup – an XML document is written in a markup language] to a second domain [relational] (see [0072], lines 1-8).

Referring to claim 14, Charlet discloses the method of claim 13, further comprising transforming one of a named construct [XML element name] to a different named construct [database field name] (see [0057] and [0071] – each XML element name is matched to a database field name); a named construct to an anonymous construct; an anonymous construct to a different anonymous construct, and an anonymous construct to a named construct.

Referring to claim 15, Charlet discloses the method of claim 13, wherein the transformation is lossless (see [0064], lines 3-6 and [0073], lines 8-11 – according to page 9, line 11 of applicants' specification, a lossless transformation is a 1:1 mapping).

Referring to claim 16, Charlet discloses the method of claim 13, wherein the mapping comprises one or more of a suppress field label, an introduce field label, a default mapping, a user customized mapping, and a mediating schema [XML schema 302 and database schema 304] (see [0061] and [0062], lines 1-3).

Referring to claim 18, Charlet discloses a method that transforms constructs between domains [markup language domain to relational domain], comprising:

providing a construct [XML document 202] to transform (see [0065], lines 1-7);

retrieving a mapping [metadata schema 208] that facilitates construct transformation (see [0070]-[0071]); and

utilizing the mapping to transform the construct (see [0072], lines 1-8 – transforming XML document 202 to hierarchical database 204).

Referring to claim 19, Charlet discloses the method of claim 18, wherein the mapping comprises at least one of a suppress field label, an introduce field label, a default mapping, a user customized mapping, and a mediating schema.

Referring to claim 26, Charlet discloses the method of claim 18, wherein the transformation comprises publishing a markup construct in a relational construct (see [0049] – the data from the XML document is passed to the hierarchical database and inserted).

Referring to claim 29, Charlet discloses a computer implemented signal transmitted between two or more computer components (see [0039]) that facilitates transforming constructs between domains [markup language domain to the relational domain], comprising the following components:

at least one of a set of suppress field labels, a set of introduce field labels [the element names 308 that match the database field names 306] (see [0057]) and a mediating schema that is utilized to transform a first construct [XML document 202] to a second construct [hierarchical database 204] (see [0061] and [0062], lines 1-3); and

a component [mapping module 206] that utilizes a mapping to transform the first construct [XML document 202] to the second construct [hierarchical database 204] (see [0062, lines 1-3 and [0071]).

Referring to claim 30, Charlet discloses a computer readable medium storing computer executable components (see [0039]) to facilitate transforming constructs between domains [markup language domain to relational domain], comprising:

a component that receives a construct [XML document 202] to transform (see [0065], lines 1-7);

a component that provides a mapping [metadata schema 208] that facilitates construct [XML document 202] transformation (see [0070]-[0071]); and

a component that utilizes the mapping to transform the construct [XML document 202] to a different domain space [going from an XML document, which is considered to represent the markup domain to a hierarchical database, which is considered to represent a relational domain] (see [0072], lines 1-8).

Referring to claim 31, Charlet discloses a construct transformation system between domains [markup language domain and relational domain] comprising a computer-readable storage medium (see [0039]), comprising:

computer-executable means [database schema 304] for determining a mapping between constructs (see [0057]); and

computer-executable means [mapping module 206] for employing the mapping to transform a first construct [XML document 202] to a second construct [hierarchical database 204] (see [0062], lines 1-3 and [0071]).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

12. Claims 7-8, 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2005/0160108 to Charlet et al as applied respectively to claims 6 and 19 above, and further in view of US Patent No 6,658,429 to Dorsett, Jr. (hereafter Dorsett).

Referring to claim 7, Charlet discloses the feature of mapping. However, Charlet fails to explicitly disclose the further limitation of a user customized mapping. Dorsett disclose a system for mapping XML data to object data, including the further limitation of wherein the user customized mapping (see column 17, line 54 – column 18, line 6) defines a construct structure to suppress and introduce labels (see column 18, lines 7-17) in order to increase the amount of input and customization that the developer has with transforming the data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the user customized ability disclosed by Dorsett's system as a substitute to the machine generated mapping of Charlet. One would have motivated to do so in order to increase the amount of input and customization that the developer has with transforming the data.

Referring to claim 8, Charlet discloses the feature of mapping. However, Charlet fails to explicitly disclose the further limitation of a user customized mapping. Dorsett disclose a system for mapping XML data to object data, including the further limitation of wherein the user customized mapping comprises at least one of an annotating type (see column 18, lines 7-17) and an annotating schema in order to

increase the amount of input and customization that the developer has with transforming the data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the user customized ability disclosed by Dorsett's system as a substitute to the machine generated mapping of Charlet. One would have motivated to do so in order to increase the amount of input and customization that the developer has with transforming the data.

Referring to claim 10, Charlet discloses the feature of mapping with a mediating schema. However, Charlet fails to explicitly disclose the further limitation of a using the schema to transform the constructs to an intermediate representation. Dorsett disclose a system for mapping XML data to object data, including the further limitation of wherein the mediating schema transforms constructs to an intermediate representation at least one of before, during and after transforming the first construct (see column 11, lines 17-20) in order to increase the efficiency and accuracy of mapping XML data to object data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of an intermediate structure as disclosed by Dorsett's system with Charlet's system. One would have motivated to do so in order to increase the efficiency and accuracy of mapping XML data to object data.

Referring to claim 20, Charlet discloses the feature of mapping with a mediating schema. However, Charlet fails to explicitly disclose the further limitation of a using the schema to transform the constructs to an intermediate representation. Dorsett disclose a system for mapping XML data to object data, including the further limitation of wherein

the mediating schema transforms constructs to an intermediate representation at least one of before, during and after transforming the first construct (see column 11, lines 17-20) in order to increase the efficiency and accuracy of mapping XML data to object data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of an intermediate structure as disclosed by Dorsett's system with Charlet's method. One would have motivated to do so in order to increase the efficiency and accuracy of mapping XML data to object data.

13. Claims 11 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2005/0160108 to Charlet et al as applied respectively to claims 1 and 18 above, and further in view of US PGPub 2004/0039964 to Russell et al (hereafter Russell et al).

Referring to claim 11, Charlet discloses a first construct and a second construct. However, Charlet fails to explicitly disclose the further limitation of complex or simple constructs. Russell et al disclose type mapping data between heterogeneous formats (see abstract), including the further limitation of wherein the first construct is a complex or a simple construct and the second construct is a complex or a simple construct (see [0035], lines 6-13 – complex constructs) in order to increase the efficiency and accuracy of mapping XML complex objects.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of complex structures as disclosed by Russell et al with Charlet's system. One would have motivated to do so in order to increase the

efficiency and accuracy of mapping XML complex objects (Russell et al: see [0005], lines 13-20).

Referring to claim 21, Charlet discloses a first construct and a second construct. However, Charlet fails to explicitly disclose the further limitation of complex or simple constructs. Russell et al disclose type mapping data between heterogeneous formats (see abstract), including the further limitation wherein the received construct is a complex or a simple construct and the transformed construct is a complex or a simple construct (see [0035], lines 6-13 – complex constructs) in order to increase the efficiency and accuracy of mapping XML complex objects.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of complex structures as disclosed by Russell et al with Charlet's method. One would have motivated to do so in order to increase the efficiency and accuracy of mapping XML complex objects (Russell et al: see [0005], lines 13-20).

Referring to claim 22, Charlet discloses transforming constructs. However, Charlet fails to explicitly disclose the further limitation wherein the transformation comprises serializing a markup construct to an object construct. Russell et al disclose type mapping data between heterogeneous formats (see abstract), including the further limitation wherein the transformation comprises serializing a markup construct [XML] to an object construct [JavaBean] (see [0061], lines 1-4) so in order to increase the efficiency of transforming XML into objects.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of a markup construct and an object construct as disclosed by Russell et al with Charlet's method for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming XML into objects.

Referring to claim 23, Charlet discloses transforming constructs. However, Charlet fails to explicitly disclose the further limitation wherein the transformation comprises deserializing an object construct to a markup construct. Russell et al disclose type mapping data between heterogeneous formats (see abstract), including the further limitation wherein the transformation comprises deserializing an object construct [JavaBean] to a markup construct [XML] (see [0090], lines 10-15) in order to increase the efficiency of transforming XML into objects.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of a markup construct and an object construct as disclosed by Russell et al with Charlet's method for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming XML into objects.

14. Claims 9, 17, 24, 25, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2005/0160108 to Charlet et al as applied respectively to claims 6, 13 and 18 above, and further in view of US Patent No 6,125,391 to Meltzer et al (hereafter Meltzer et al).

Referring to claim 9, Charlet discloses transforming constructs. However, Charlet fails to explicitly disclose the further limitation wherein the default mapping is based on one or more of a heuristic, an inference, a probability and machine learning. Meltzer et al disclose transforming constructs (see column 30, lines 13-21), including the further limitation wherein the default mapping is based on one or more of a heuristic, an inference, a probability and machine learning (see column 27, lines 4-8) in order to increase the efficiency of transforming constructs.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature for using a default mapping to transform constructs as disclosed by Meltzer et al with Charlet's system for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming constructs.

Referring to claim 17, Charlet discloses transforming constructs. However, Charlet fails to explicitly disclose the further limitation wherein the mapping is based on one or more of a heuristic, an inference, a probability and machine learning. Meltzer et al disclose transforming constructs (see column 30, lines 13-21), including the further limitation wherein the mapping is based on one or more of a heuristic, an inference, a

probability and machine learning (see column 27, lines 4-8) in order to increase the efficiency of transforming constructs.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature for using a default mapping to transform constructs as disclosed by Meltzer et al with Charlet's method for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming constructs.

Referring to claim 24, Charlet discloses transforming constructs. However, Charlet fails to explicitly disclose the further limitation wherein the transformation comprises persisting an object construct to a relational construct. Meltzer et al disclose transforming constructs (see column 30, lines 13-21), including the further limitation wherein the transformation comprises persisting an object construct to a relational construct (see column 33, lines 9-12) in order to increase the efficiency of transforming objects into relations.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of a relational construct and an object construct as disclosed by Russell et al with Charlet's method for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming objects into relations.

Referring to claim 25, Charlet discloses transforming constructs. However, Charlet et al fail to explicitly disclose the further limitation wherein the transformation comprises restoring an object construct from a relational construct. Meltzer et al

disclose transforming constructs (see column 30, lines 13-21), including the further limitation wherein the transformation comprises restoring an object construct from a relational construct (see column 33, lines 9-12) in order to increase the efficiency of transforming objects into relations.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of a relational construct and an object construct as disclosed by Russell et al with Charlet's method for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming objects into relations.

Referring to claim 27, Charlet discloses transforming constructs. However, Charlet fails to explicitly disclose the further limitation wherein the transformation comprises shredding a relational construct to markup construct. Meltzer et al disclose transforming constructs (see column 30, lines 13-21), including the further limitation wherein the transformation comprises shredding a relational construct to markup construct (see column 33, lines 9-12) in order to increase the efficiency of transforming relations into markup.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature of a relational construct and a markup construct as disclosed by Russell et al with Charlet's method for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming relations into markup.

Referring to claim 28, Charlet discloses transforming constructs. However, Charlet fails to explicitly disclose the further limitation wherein the transformation comprises binding the received construct to a user interface, the received construct is one of an object construct, a markup construct, a relational construct and a disparate user interface construct. Meltzer et al disclose transforming constructs (see column 30, lines 13-21), including the further limitation wherein the transformation comprises binding the received construct to a user interface, the received construct is one of an object construct, a markup construct, a relational construct and a disparate user interface construct (see column 7, line 61 – column 8, line 1 – binding two user interfaces) in order to increase the efficiency of transforming constructs..

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the feature binding constructs as disclosed by Russell et al with Charlet's method for transforming constructs. One would have motivated to do so in order to increase the efficiency of transforming constructs.

Response to Arguments

15. Applicant's arguments filed 7 December 2006 have been fully considered but they are not persuasive.

16. In regards to applicants' arguments on pages 8-9 referring to the 35 U.S.C. 101 rejections of claims 1-12, 29 and 31, the applicant argues that the amendments of the claims overcome the 35 U.S.C. 101 rejections. However, the amendment to claim 29 fails to overcome the rejection since a computer-implemented signal is not considered to represent statutory subject matter.

17. In regards to applicants' arguments on page 9-10 referring to the prior art rejections of claims 1-6, 12-16, 18-19, 26 and 29-31, the applicants state: The claimed subject matter relates to a system and method that transforms constructs of different type-systems, from one domain to another domain. This enables various components in different domains to seamlessly share tasks or encapsulated business oriented information, as per the needs of the specific domain application. To that end, claim 1 recites "A system that maps a first construct of a domain to a second construct of another domain." (claims 13, 18, 29, 30 and 31 recite similar features). Charlet et al fails to disclose such claimed aspects.

The examiner respectfully disagrees that Charlet fails to disclose the claimed aspects of the amended claim. As cited above Charlet discloses a system [system 400] that maps a first construct [XML document 202] of a domain [markup language] to a second construct [hierarchical database 204] ([0061]) of another domain [relational]. The XML document 202 and the hierarchical database 204 are considered to represent

constructs. According to the applicants' specification, an example of a construct is structured data (see page 8, lines 6-7). Since both XML documents and hierarchical databases represent structured data, Charlet is considered to teach the limitation of a first construct and a second construct. Also, the XML document 202 is written in the markup language XML and hierarchical database is considered to be relational. According to applicants' abstract, examples of domains are object, markup, relational and user interface (see abstract, lines 1-3). Therefore, the XML document 202 is considered to represent a first construct of a markup domain and the hierarchical database is considered to be a second construct of the relational domain, which is different than the markup domain.

Furthermore, in response to applicant's arguments, the recitation of "maps a first construct **of a domain** to a second construct **of another domain**" has not been given patentable weight because the recitation occurs in the preamble. The claim limitations only recite mapping the first construct to the second construct. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

The applicant continues to argue the following: The examiner erroneously asserts that Charlet et al substantially teaches "a system that maps a first construct of a domain to a second construct of another domain" on page 6, of the Office Action dated September 20, 2006. The cited reference provides for the transfer of raw data, from an XML document classified under field names to a hierarchical database. In contrast, the claimed subject matter deals with a construct, which is an executable part of a program module or a set of declared instructions, classified under elements.

The examiner respectfully disagrees. Before claim 1 was amended, the claim recited a system that maps a first construct to a second construct. Therefore, the examiner did not assert that Charlet teaches "a system that maps a first construct of a domain to a second construct of another domain" on page 6, of the Office Action dated September 20, 2006. Also Charlet teaches mapping XML element names 308 to database field names 306, which is considered to represent modifying the names. According to page 3, lines 21-23 of Applicants' specification, introduced field labels can be utilized during the mapping process to modify existing names. Furthermore, it is not found in the specification where a construct is explicitly defined as "a construct, which is an executable part of a program module or a set of declared instructions, classified under elements." However, in lines 6-7 of page 8 of the applicants' specification, structured data is given as an example of a construct.

18. In regards to applicants' arguments on page 10 referring to the prior art rejections of claim 29, the applicants state: Claim 29 recites "A computer implemented signal transmitted between two or more computer components that facilitates transforming constructs, comprising: "at least one of a set of suppress field labels, a set of introduce field labels and a mediating schema that is utilized to transform a first construct to the second construct." Charlet et al fails to disclose, teach, or suggest such claimed aspects. Again, as stated *supra*, Charlet et al is related to raw data mapping a transfer and does not teach mapping constructs.

The examiner respectfully disagrees. Charlet discloses a set of introduce field labels [the element names 308 that match the database field names 306] (see [0057]). Also, Charlet is related to mapping XML element names 308 to database field names 306, which is considered to represent modifying the names. According to page 3, lines 21-23 of Applicants' specification, introduced field labels can be utilized during the mapping process to modify existing names.

The applicant continues to argue the following: Whereas in the claimed subject matter, additionally, structural mismatch when transforming between named and anonymous constructs of different domains is addressed. The schema bank which is utilized to store mediating schema can be employed to generate an intermediate structure when serializing and/or deserializing constructs. The set(s) of introduce or suppress labels and a mediating schema that is utilized to transform a first construct to a second construct.

The examiner points out that the scope of the claim limitations is much broader than what is stated in the arguments. The claimed invention comprises at least one of a set of suppress field labels, a set of introduce field labels and a mediating schema that is utilized to transform a first construct into the second construct; and a component that utilizes a mapping to transform the first construct to the second construct. As cited above, Charlet discloses the claimed limitations of a set of introduce field labels to transform a first construct to a second construct; and a component that utilizes a mapping to transform a the first construct to the second construct.

19. Regarding the rejections of claims 7-8, 10 and 20, as cited above, Charlet discloses all claim limitations of claims 1 and 18. Therefore, the rejections of claims 7-8, 10 and 20 as being unpatentable over Charlet et al in view of Dorsett, Jr. have been maintained.

20. Regarding the rejections of claims 11 and 23, as cited above, Charlet discloses all claim limitations of claims 1 and 18. Therefore, the rejections of claims 11 and 23 as being unpatentable over Charlet et al in view of Russell et al have been maintained.

21. Regarding the rejections of claims 9, 17, 24, 25, 27 and 28, as cited above, Charlet discloses all claim limitations of claims 1, 13 and 18. Therefore, the rejections of claims 9, 17, 24, 25, 27 and 28 as being unpatentable over Charlet et al in view of Meltzer et al have been maintained.

Conclusion

22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US PGPub 2005/0114394 titled "Mapping XML Schema Components to Qualified Java Components" to Kaipa et al

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Lovel whose telephone number is (571) 272-2750. The examiner can normally be reached on 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art Unit 2167

8 February 2007
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